

SPECIAL INSTRUCTION NO. 114F-21

May 24, 2021

V2500 High Pressure Turbine Hubs – Require removal

APPLICATION:

This Special Instruction is applicable to the stage 2 High Pressure Turbine Hub Part Number 2A4802 with Serial Numbers listed in this document.

Type Certificate Holder is International Aero Engines, AG (IAE AG). Pratt & Whitney is providing this data on behalf of IAE AG.

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THE REASON FOR THIS SPECIAL INSTRUCTION:

On March 18, 2020 V16580 engine experienced an aborted take-off, a fracture of the High Pressure Turbine (HPT) stage 1 Hub and an uncontained event. The cause of fracture is an anomaly in the material. Recent findings require accelerated removal of certain suspect HPT hubs. The part number and serial number hubs listed in Table 1 of this document require removal from service within specified cyclic draw down limits and subsequent angle scan ultrasonic inspection per NMSB 72-0015.

APPROVAL:

Not applicable.

DESCRIPTION:

The purpose of this Special Instruction (SI) is to remove from service within specified cyclic draw down limits the HPT stage 2 Hub Part Number 2A4802 with Serial Numbers listed in this document and to subsequently perform angle scan ultrasonic inspection per NMSB 72-0015.

COMPLIANCE CATEGORY:

Category 3

Remove from service the HPT stage 2 Hubs with Serial Numbers listed in Table 1 within 385 cycles from the time of receipt of this SI and subsequently perform angle scan ultrasonic inspection per NMSB 72-0015.

REFERENCES:

- A. ATA Locator 72-45-31.
- B. V2500-E5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4385, Chapter/Section 72-45-31.
- C. V2500-E5 Series Engine Shop Manual, P&W Ref. PN 2A4383, Chapter/Section 72-45-31.
- D. V2500-E5-72-0015 NON-MODIFICATION SERVICE BULLETIN ENGINE HUB, HIGH PRESSURE TURBINE (HPT), STAGE 1 AND 2 ANGLE SCAN ULTRASONIC INSPECTION TO FIND AN ANOMALY IN THE MATERIAL

NECESSARY TOOLS:

See Engine Removal Task in AMM.

ADDED DATA:

- A. Time to Accomplish Task: N/A.
- B. Disposition of Hardware Removed: See Hardware Disposition Instructions below.
- C. Consumables Required for task for each engine.

Part Name	Part Number	UPE
N/A	N/A	N/A

ACCOMPLISHMENT INSTRUCTIONS:

- Remove from service engines containing hubs with Serial Numbers listed in Table 1 within the cyclic draw down limits specified in the Compliance section above.
- 2) Accomplish inspection of HPT stage 2 Hub per NMSB 72-0015.

NOTE – Compliance with this SI in its entirety constitutes compliance with NMSB 72-0015. Hubs that are removed form service and are inspected per NMSB 72-0015 in accordance with this SI and are found acceptable will be marked as such per NMSB 72-0015.

Table 1. HPT stage 2 Hub Serial Number.

PKLBR37634	PKLBR83748
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MATERIAL INFORMATION:

A. The material data that follows is for each engine:

New P/N	Qty	Key Word	Old P/N	Instructions-Disposition
Same	1	Hub	2A4802	See Hardware disposition

B. Parts Modification Conditions

Not applicable

- C. Spare Parts Availability
 - (A) Contact Customer Fleet Director for spare part availability.
- D. Data on Interchangeable Parts

Not applicable

INDUSTRY SUPPORT PROGRAM

Contact Customer Fleet Director for Industry Support Program details.

HARDWARE DISPOSITION INSTRUCTIONS

Follow instructions in NMSB 72-0015.